

Title (en)  
Planar thin film magnetic head

Title (de)  
Planarer Dünnfilmmagnetkopf

Title (fr)  
Tête magnétique planaire à films minces

Publication  
**EP 0689196 B1 19981014 (EN)**

Application  
**EP 95112455 A 19910821**

Priority  
• EP 91114008 A 19910821  
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Abstract (en)  
[origin: EP0472187A1] A planar thin film magnetic head is disclosed wherein an axis of easy magnetization in the vicinity of a magnetic gap (g) of a magnetic yoke (37) is forcibly made coincident with the direction of a track width by a magnetic field due to current flowing in a conductor layer (38). Accordingly, even though the track width is small, a high magnetic permeability, low Barkhausen noise and linear responsiveness can be realized to thereby improve the sensitivity, output and linearity. In another aspect of the invention, a throat portion is eliminated from a thin film magnetic core forming a magnetic gap. The thin film magnetic core is configured such that a pair of magnetic members constituting the magnetic core are diverged from the magnetic gap so that a divergent angle  $\theta$ , of first opposite side edges of the magnetic members, from a direction of the gap length of the magnetic gap, is set to the range of  $30 \text{ DEG} \leq \theta \leq 80 \text{ DEG}$ , and the magnetic members have second opposite side edges extending in substantially parallel to the direction of the gap length of the magnetic gap. Accordingly, even though a track width is reduced less than  $10 \mu\text{m}$ , adjoining crosstalk or off track crosstalk can be avoided to thereby realize low-noise and high quality reproduction and improve the operating characteristics. <IMAGE>

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IPC 8 full level  
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